



## RS40-0009CCCCSDAEHH04.0.

Industrial Networking:Industrial Ethernet:RS40 Full Gigabit:Switches Release 4.0

### Product description

Description	ETHERNET/Fast ETHERNET/Gigabit Ethernet-switch according to IEEE 802.3 compact, managed, Industrial switch for DIN rail, store-and-forward-switching, fanless design, Software Layer 2 Enhanced
Port type and quantity	Gigabit ETHERNET ports in total: 9; 4 x Combo ports (10/100/1000BASE TX RJ45 plus related FE/GE-SFP slot); 5 x 10/100/1000BASE TX RJ45
Type	RS40-0009CCCCSDAEHH04.0.
Order No.	943-935-001

### More Interfaces

Power supply/signaling contact	1 x plug-in terminal block, 6-pin
V.24 interface	1 x RJ11 socket
USB interface	1 x to connect auto-configuration adapter ACA21-USB

### Network size - length of cable

Twisted pair (TP)	0 - 100m
Multimode fiber (MM) 50/125 µm	0 - 550m, 0 - 7,5 dB link budget (with M-SFP-SX/LC)
Multimode fiber (MM) 62.5/125 µm	0 - 275m, 0 - 7,5 dB link budget (with M-SFP-SX/LC)
Single mode fiber (SM)9/125 µm	0 - 20km, 0 - 11 dB link budget (with M-SFP-LX/LC)
Single mode fiber (LH)9/125 µm (long haul transceiver)	16 - 80km, 6 - 22 dB link budget (with M-SFP-LH/LC) 44 - 120km, 13 - 32 dB link budget (with M-SFP-LH+/LC)

### Network size - cascadability

Line - / star topology	Any
Ring structure (HIPER-Ring)	50 (reconfiguration time < 0.3 sec.)

### Power requirements

Operating voltage	12/24/48 V DC (9,6-60) V and 24 V AC (18-30) V
Current consumption at 24 V DC	750 mA
Current consumption at 48 V DC	375 mA
Power output in Btu (IT) h	62

### Software

Management	Serial interface, web-interface, SNMP V1/V2, HiVision file transfer SW HTTP/TFTP
Diagnostics	LEDs, log-file, syslog, signal contact, RMON, port mirroring, topology discovery 802.1AB
Configuration	Command Line Interface (CLI), TELNET, BootP, DHCP, DHCP Option 82, HiDiscovery, auto configuration adapter (ACA11, ACA21-USB), Watchdog configuration
Security	Port security (IP and MAC), SNMP V3 (no encryption)
Redundancy functions	HIPER-Ring (ring structure), MRP (IEC-Ring functionality), RSTP 802.1w, redundant network/ring coupling, redundant 24 V power supply
Industrial Profiles	EtherNet/IP and PROFINET compatible, configuration and diagnostic via automation software tools like e.g. STEP7, or Control Logix
Filter	QoS 4 Klassen, Portpriorisierung (IEEE 802.1D/p), VLAN (IEEE 802.1Q), shared VLAN learning, Multicast (IGMP Snooping/Querier), Multicast Detection unknown Multicast, Broadcastlimiter, Fast Aging
Realtime	SNTP server, PTP / IEEE 1588
Flow control	Flow control 802.3x
Presettings	pre-configured for EtherNet/IP or PROFINET (optional)

### Ambient conditions

Operating temperature	0° up to +60°C, optional -40° up to +70°C (EEC)
Storage/transport temperature	-40° to +70°C
Protective paint on PCB	optional conformal coating
Relative humidity (non-condensing)	10% to 95%
MTBF	22 years (MIL-HDBK-217F)
<b>Mechanical construction</b>	
Dimensions (W x H x D)	74 x 131 x 111 (EEC 110 x 131 x 111)
Mounting	DIN Rail
Weight	530 g (EEC 700g)
Protection class	IP20
<b>Mechanical stability</b>	
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
IEC 60068-2-6 vibration	1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13,2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.
<b>EMC interference immunity</b>	
EN 61000-4-2 electrostatic discharge (ESD)	6 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	10 V/m (80 - 1000 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 1 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line
EN 61000-4-6 conducted immunity	3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)
<b>EMC emitted immunity</b>	
FCC CFR47 Part 15	FCC CFR47 part 15 class A
EN 55022	EN 55022 class A
<b>Approvals</b>	
Safety of industrial control equipment	cUL 508 (pending)
Hazardous locations	cUL 1604 class1 div 2 (pending)
Germanischer Lloyd	optional
Substation	optional
Railway norm	optional
<b>Scope of delivery and accessories</b>	
Scope of delivery	Device, terminal block, operating manual
Accessories to order separately	Rail power supply RPS 30, RPS 80 EEC or RPS 120 EEC, terminal cable, network management HiVision, auto-configuration adapter (ACA21-USB), 19" installation frame